

# Tropicana Hybrid Renewable Energy Plant

Fact Sheet / **March 2025**



## Profile of the operation

**Tropicana is a large open pit and underground mine, located 330km east-northeast of Kalgoorlie in Western Australia. The mine is 70% owned and managed by AngloGold Ashanti with the remaining 30% held by Regis Resources Ltd.**

Pacific Energy owns and operates the off-grid hybrid power station at Tropicana under a 10-year build-own-operate agreement.

## Overview

AngloGold Ashanti took a significant step forward in our decarbonisation journey following the transition to commercial operation of the renewable energy facility at Tropicana in February 2025.

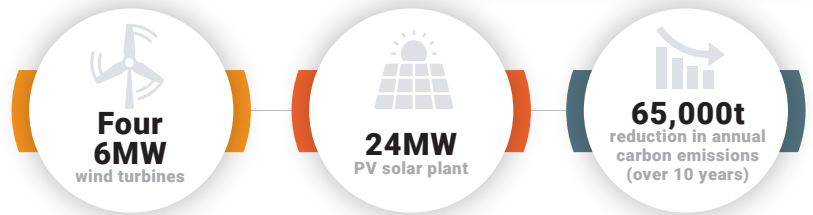
The project involved integrating 61MW of wind and solar generation into the existing 54MW gas-fired power station at the mine to create the largest off-grid hybrid power system in Australia.

Constructed by Pacific Energy, the project involved more than 200,000 on-site labour hours and was delivered safely on time and on budget.

Tropicana's renewable energy facility supports AngloGold Ashanti's strategy to reduce its global net carbon emissions from energy use by 30% by 2030, as part of its roadmap to achieve net zero carbon emissions by 2050.

It is the first facility of its kind to be implemented within the AngloGold Ashanti group.

The decarbonisation journey at Tropicana started in 2016 when diesel power generation was replaced with natural gas generation enabled by the extension of the Eastern Goldfields natural gas pipeline.



## Integrating solar and wind energy generation

Construction of the Tropicana renewable facility started in August 2023.

The remote mine is accessed via a 375km dirt road from the Western Australian town of Kalgoorlie-Boulder. Tropicana worked with the local shires on a transport route and preparing the roads that were used.

The 80m long wind turbine blades were shipped to Geraldton Port on the coast of WA and transported approximately 1,200km by road on specially constructed trucks. Each 130m high turbine tower was transported in seven sections. A 1,000t crane, the largest in WA, was used to construct the towers and blades. It was transported to the site in sections in approximately 60 truckloads.

Commissioning of the 24MW solar farm, comprising 42,120 solar panels of 545 watts each, with single axis tracking and a 13MWh grid-forming battery energy storage system (BESS), began in the September 2024 quarter. Single axis tracking allows the solar panels to rotate and follow the sun as it moves from east to west, maximizing the sunlight hitting the PV surface. The BESS is used to provide circuit stability rather than energy storage.


The installation of the four 6MW wind turbines was completed in the December 2024 quarter. The Goldwind turbines each have a hub height of 130m and measure more than 210m from footing to blade tip. The blades have a rotor diameter of 165m and are capable of rotating at speeds of 10.7 revolutions per minute.

Pacific Energy's inhouse-designed intelligent control system optimises input from the high penetration renewables and storage technologies which will enable the system to run hydrocarbons free for extended periods of time.

Commercial completion was achieved in February 2025.

# Expected benefits

Overall, the renewables integration is expected to reduce Tropicana's diesel and gas consumption for power generation by 96% and 50% respectively, slashing carbon emissions by more than 65,000 tonnes per annum on average over the 10-year life of the agreement with Pacific Energy.





This is equivalent to planting 33 million trees per annum, removing 23,000 cars from the road every year, or eliminating 2.8 million long-haul plane trips per year. It equates to a reduction of 5.6 million litres of diesel a year and 1.1 million gas gigajoules per annum.



## AngloGold Ashanti's decarbonisation journey

The hybrid renewable energy plant at Tropicana is the first major renewables project completed by AngloGold Ashanti as we advance our strategy to reduce our carbon emissions. Our Roadmap to Net Zero focuses on all sources of energy-related emissions, both at our mine sites and from our electric power providers.

### Decarbonisation milestones:

<p><b>2008</b></p> <ul style="list-style-type: none"> <li>Set a long-term target to reduce the greenhouse gas (GHG) emissions intensity of our portfolio by 30 over 15 years (from a 2007 base)</li> </ul>	<p><b>2021</b></p> <ul style="list-style-type: none"> <li>Achieved a 47% reduction in GHG emissions intensity through fuel switching, efficiency improvements and the closure and divestment of assets</li> <li>New Climate Change Strategy approved by the Board</li> <li>Published a stand-alone Climate Change Report in line with the guidelines and recommendation of the Task Force on Climate-Related Financial Disclosures (TCFD)</li> <li>As a member of the ICMM, we were part of the mining industry's landmark climate change commitment to achieve net zero Scope 1 and Scope 2 GHG emissions by 2050 and to accelerate action on reducing Scope 3 GHG emissions, including setting credible reduction targets in partnership with our suppliers</li> </ul>	<p><b>2022</b></p> <ul style="list-style-type: none"> <li>Announced our commitment to reduce carbon emissions by 30% by 2030 (2021 baseline) and net zero emissions by 2050</li> <li>Initiated the renewable energy project at Tropicana</li> </ul>	<p><b>2024</b></p> <ul style="list-style-type: none"> <li>Geita successfully connected to the national electricity grid, which is expected to reduce diesel use for power generation by up to 80%</li> </ul>
<p><b>2018</b></p> <ul style="list-style-type: none"> <li>Met our initial emissions reduction targets by achieving a 43% reduction in carbon intensity, well before the 2022 self-imposed deadline</li> </ul> 		<p><b>2023</b></p> <ul style="list-style-type: none"> <li>Construction of the Tropicana renewable facility started</li> <li>Initiated a project at the Geita Gold Mine to switch from predominantly diesel-generated power to the Tanzanian national grid, which uses hydropower and natural gas as its primary sources of energy</li> </ul>	<p><b>2025</b></p> <p><b>Successfully completed the renewable energy facility at Tropicana</b></p> 



## More on our Roadmap to Net Zero:

[www.anglogoldashanti.com/sustainability/environment/energy-climate-change/](http://www.anglogoldashanti.com/sustainability/environment/energy-climate-change/)



**ROADMAP TO NET ZERO**